

What are the criteria for Multiway Stop applications?

According to the Texas Manual on Uniform Traffic Control Devices (TMUTCD), stop signs should be installed in a way that minimizes the number of vehicles having to stop and should not be used for speed control. “Multiway stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multiway stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multiway stop control is used where the volume of traffic on the intersecting roads is approximately equal.”

The TMUTCD states that an engineering study should be completed to determine whether stop signs should be installed. The study should consider the following criteria:

- A. When traffic signals are justified, a multiway stop condition can be temporarily implemented while “arrangements are being made for the installation” of the signals.
- B. If a crash problem, “as indicated by 5 or more reported crashes in a 12-month period that are susceptible to correction by a multiway stop installation”, exists. Crashes corrected by a multiway stop include right- and left-turn collisions and right-angle collisions.
- C. If minimum volumes exist.
 - 1. The vehicle volume approaching the intersection on the major street has an average of at least 300 vehicles per hour for any 8 hours, **and**
 - 2. The total volume of vehicles, pedestrians, and bicycles approaching the intersection from the minor street exceeds an average of 200 units per hour for the same 8 hours. Additionally, the delay for vehicles on the minor street must exceed 30 seconds per vehicle during the highest hour.
 - 3. **However**, if the 85th percentile speed of vehicles approaching the intersection on the major street exceeds 40 mph, the volume warrants listed in C.1 and C.2 can be reduced to 70% of their stated values.
- D. If no single criterion is satisfied, then the combination of B, C.1, and C.2 are satisfied if the existing crashes and volumes exceed 80% of the values listed Warrants B, C.1, and C.2.